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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/689,785	10/21/2003	William K. Dail	060507-1054	7567

26371 7590 09/29/2005

FOLEY & LARDNER
777 EAST WISCONSIN AVENUE
SUITE 3800
MILWAUKEE, WI 53202-5308

EXAMINER

JIANG, CHEN WEN

ART UNIT	PAPER NUMBER
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3744

DATE MAILED: 09/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/689,785

Applicant(s)

DAIL, WILLIAM K.

Examiner

Chen-Wen Jiang

Art Unit

3744

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 October 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-43 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 24-43 is/are allowed.
- 6) ☒ Claim(s) 1-12 and 16-23 is/are rejected.
- 7) ☒ Claim(s) 13-15 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 10/21, 2/26, 7/21.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 11 provides for the use of modular refrigeration system, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claim 11 is rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

3. The following rejections are based on the best understanding of the claimed limitations.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-10 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Schaeffer et al. (U.S. Patent Number 5,440,894).

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In regard to claims 1-4,6, Schaeffer et al. disclose a modular commercial refrigeration system. Referring to Figs.1-3, the system comprises a coolant source 11A or compression system 20, modular cooling element 29 in desired location for desired temperature. Each of the cooling zones 33 is a temperature-controlled case.

In regard to claim 5, the main heat exchanger is the shopping arena building air-conditioning unit.

In regard to claim 7, there would be no invention in shifting the location of the part to a different position since the operation of the device would not thereby be modified. *In re Japikse*, 86 USPQ 70 (CCPA 1950).

In regard to claims 8 and 9, the location of the modular element is a design choice.

In regard to claim 10, Fig.2 shows the expansion valve is controlled based on the evaporator temperature.

6. Claims 12,16,17,18,19,20,21 and 22 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Schaeffer et al. (U.S. Patent Number 5,440,894).

In regard to claim 12, Schaeffer et al. disclose a modular commercial refrigeration system. Referring to Figs.1-3, the system comprises a building space cooling unit, a coolant source 11A or compression system 20, modular cooling element 29 in desired location for desired temperature. Each of the cooling zones 33 is a temperature-controlled case.

In regard to claim 16, the main heat exchanger is the shopping arena building air-conditioning unit.

In regard to claim 18, there would be no invention in shifting the location of the part to a different position since the operation of the device would not thereby be modified. *In re Japikse*, 86 USPQ 70 (CCPA 1950).

In regard to claims 17,19 and 20, the location of the modular element is a design choice.

In regard to claim 21, Fig.2 shows the expansion valve is controlled based on the evaporator temperature.

In regard to claim 22, fin-coil type heat exchanger is a well-known heat exchanger in the prior art.

7. Claims 1,2,3,4,6,7,8,9,10 and 11 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Wolff et al. (U.S. Patent Number 5,924,297).

In regard to claims 1,2,4,6,10 Wolff et al. disclose a refrigerated merchandiser with modular evaporator coils. Referring to Figs.6 and 8, the system comprises refrigeration system 126,226, separate expansion valves 123,223 for each coil section 122,222 operated independently in response to its own sensing bulb 128 and preset condition.

In regard to claim 3, Wolff et al. disclose that there has been development work in utilizing non-compressible liquid chemical coolants (so called "glycol-type" systems using glycol or ethylene solutions or some other secondary heat transfer liquid) for producing the merchandiser cooling effect.

In regard to claim 7, the evaporator is modular and able to arrange in different locations as shown in Figs.6 and 8.

In regard to claims 8 and 9, the location of the modular element is a design choice.

In regard to claim 11, minimized temperature variation is achieved when individual sensing bulbs are preset at same temperature.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schaeffer et al. (U.S. Patent Number 5,440,894) in view of Norton (U.S. Patent Number 4,501,126) or Morrison et al. (U.S. Patent Number 4,493,010).

Schaeffer et al. disclose the invention substantially as claimed. However, Schaeffer et al. does not disclose quick disconnect device. Norton and Morrison et al. disclose quick disconnect device in the same field of endeavor for the purpose of connect/disconnect evaporator.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the apparatus of Schaeffer et al. with a quick disconnect device in view of Norton or Morrison et al. so as to have quick connection.

Allowable Subject Matter

10. Claims 24-43 are allowed.
11. Claims 13-15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chen-Wen Jiang whose telephone number is (571) 272-4809. The examiner can normally be reached on Monday-Thursday from 8:00 to 6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cheryl Tyler can be reached on (571) 272-4834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Chen-Wen Jiang
Primary Examiner

